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EXAMINER

PIZIALI, JEFFREY J

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,340

Applicant(s)

OU, CHI-YUAN

Examiner

Jeff Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 18 (see Fig. 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "38" (i.e. described in the Specification as the "working power supply") has been used to designate two separate and distinct parts in Fig. 3. It would be unclear to one having ordinary skill in the art what these two parts are meant to represent (see also Page 6, Lines 16-19 of the Specification). Note there is only one "working power supply 38" illustrated in Fig. 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

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sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

Page 2, Line 6 should be changed from "hardly to be popularized" to "hard to popularize" (or something similar);

the phrase "received by the infrared transmission interface" on Page 8, Line 13 is unclear in meaning because "transmission interfaces" are designed to transmit (not receive) data; and

Page 9, Line 5 should be changed from "will not be disappeared with any needs" to "will not disappear without any need" (or something similar).

Appropriate correction is required.

Claim Objections

4. Claim 1 is objected to because of the following informalities:

Line 3 should be changed from "a multiplicity of inspecting window" to "a multiplicity of inspecting windows" (or something similar); and

Line 5 should be changed from "accessing -image data" to "accessing image data."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 recites the limitations "the front" in lines 2-3; "the backside" in line 4; "the memory card" in line 5; "its driving circuit" in line 10; "display format" in line 13; "the bistable display" in line 14; "the whole control circuit" in line 18; "the digital image data" in line 19; "the variant frame" in line 20; "the displaying effect" in lines 22-23. There is insufficient antecedent basis for these limitations in the claim.

8. Claim 1 is further rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are between "a multiplicity of selection push buttons" in lines 3-4 and "a multiplicity of selection push buttons" in line 9. It would remain unclear to one skilled in the art whether there are multiple separate and distinct sets of push buttons, or whether the claim is referring to the same single set of push buttons.

9. Claim 1 is also rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are between "storing the image data accessed from the card reader" (recited in line 8), "performing decoding, decrypting and sorting on the data stored in the memory" (recited in lines 12-13), "transforming the data into display format" (recited in line 13), and "displaying the image data" (recited in lines 15-16). It would remain unclear to one skilled in the art whether the invention displays the image data in a format identical to that accessed from the card reader, or whether the invention displays the image data in a different, post-decoding/decrypting/sorting display format.

10. Claim 1 is additionally rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are between "providing the power source required by the whole control circuit and the bistable display" (recited in lines 17-18) and "constitut[ing] the displaying effect as a photo picture without continuous power supply" (recited in line 23). It would remain unclear to one skilled in the art how the invention can be said to lack a "continuous power supply" when a "power source" has been explicitly provided.

11. Claim 2 recites the limitation "the image displaying format" in line 4 and "the staying and replacing time" in lines 4-5. There is insufficient antecedent basis for these limitations in the claim.

12. Claim 3 recites the limitation "the input data" in line 4. There is insufficient antecedent basis for this limitation in the claim.

13. Regarding claim 3, the phrase "various external storage devices" (see line 4) renders the claim indefinite because it is unclear what limitations are encapsulated by this phrase, as well as what particular limitations are part of the claimed invention. See MPEP § 2173.05(d).

14. Claim 4 recites the limitation "the input data" in line 3, and "the infrared receiving device" in lines 4-5. There is insufficient antecedent basis for these limitations in the claim.

15. Regarding claim 4, the phrase "various external storage devices" (see lines 3-4) renders the claim indefinite because it is unclear what limitations are encapsulated by this phrase, as well as what particular limitations are part of the claimed invention. See MPEP § 2173.05(d).

16. Claim 5 recites the limitation "the input data" in line 3, and "the Bluetooth receiving device" in lines 4-5. There is insufficient antecedent basis for these limitations in the claim.

17. Regarding claim 5, the phrase "various external storage devices" (see lines 3-4) renders the claim indefinite because it is unclear what limitations are encapsulated by this phrase, as well as what particular limitations are part of the claimed invention. See MPEP § 2173.05(d).

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18. Claim 6 recites the limitation "the external power source transformer" in lines 2-3, "the power source outlet" in line 3, "the power source required" in line 4, and "the whole control circuit" in line 4. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki et al (US 6,766,332 B2) in view of Thompson et al (US 6,504,580 B1).

Regarding claim 1, Miyazaki discloses a multi-development picture and picture-frame structure [Fig. 1A; 10], comprising: a picture-frame body [Fig. 1A; 10a, 10b], having a development window [Fig. 1A; 13] provided in the front [Fig. 1A; 10b] and a multiplicity of inspecting windows [Fig. 3; 12 -- i.e. "pic. 9," "pic. 10," "pic. 11," and "pic. 12"], a card reader port [Fig. 1A; 32], and a multiplicity of selection push buttons [Fig. 1A; 39] provided on the backside [Fig. 1A; 10a] therein (see Column 6, Line 51 - Column 7, Line 4); a card reader [Fig. 11; 92], for accessing image data in the memory card [Fig. 1A; 31] of a digital camera [i.e. electronic still camera] (see Column 7, Lines 5-14); a memory, being a nonvolatile random access memory [Fig. 11; 96] or flash memory, is used for storing the image data accessed from the card reader; a microprocessor [Fig. 20; 91], connected to a multiplicity of selection buttons [Fig. 20; 97] (see Column 16, Lines 11-32), the card reader, the memory and its driving circuit

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respectively for providing image selection signals and time setting for manipulating push buttons [Fig. 21B; Auto Play Mode], as well as performing decoding, decrypting and sorting [Fig. 37; 183, 184] on the data stored in the memory in order to transform the data into display format; a driving circuit, for driving the display (see Column 23, Lines 58-67); a display [Fig. 37; 12, 13], connected to the driving circuit for displaying the image data; and a working power supply, being a battery, for providing the power source required by the whole control circuit and the display (see Column 6, Lines 58-61); whereby the digital image data accessed from the card reader can be shown on the display by selecting the variant frame and displaying time by employing the combination of the above-mentioned devices (see Column 7, Lines 28-37). While Miyazaki discloses employing a generic liquid crystal display (see Column 6, Lines 56-58), Miyazaki does not expressly disclose using a bistable display.

However, Thompson employs a liquid crystal display [Figs. 1 & 3; 14] (see Column 4, Lines 54-60) that can be bistable, wherein an image can be stayed to constitute a displaying effect as a photo picture without continuous power supply (see Column 7, Lines 40-42). Miyazaki and Thompson are analogous art, because they are from the shared field of portable, battery-operated, display devices allowing a user to selectively receive (from external peripheral storage devices) and manipulate (via buttons and keys) image data on liquid crystal display panels. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use Thompson's bistable-type LCD as Miyazaki's liquid crystal display, so as to require no power to maintain an image on the display.

Regarding claim 2, Miyazaki discloses the memory is provided with an image transformation program [Fig. 37; 183, 184] as well as an image staying and replacing program [Fig. 21B; Auto Play Mode] in order to transform the digital image data into the image displaying format (see Column 23, Lines 58-67), and the staying and replacing time of the image can be controlled by the program (see Column 16, Lines 52-67).

Regarding claim 3, Thompson discloses the microprocessor [Fig. 3; 32] is further connected to a USB interface, and/or an infrared transmission interface [Fig. 3; 35], and/or a Bluetooth transmission interface [Fig. 3; 37] (see Column 7, Lines 17-33), to receive the input data from various external storage devices [e.g. cable decoder, computer, modem, paging network, cellular phone, PCS devices, etc.] and store them in the memory [Fig. 3; 40] (see Column 5, Lines 33-41).

Regarding claim 4, Thompson discloses the microprocessor [Fig. 3; 32] is further connected to an infrared transmission interface [Fig. 3; 35] (see Column 7, Lines 17-33), and the input data are received from various external storage devices [e.g. cable decoder, computer, modem, etc.] and stored in the memory [Fig. 3; 40] through the infrared receiving device [Fig. 3; 34] (see Column 5, Lines 33-41).

Regarding claim 5, Thompson discloses the microprocessor [Fig. 3; 32] is further connected to the Bluetooth transmission interface [Fig. 3; 37] (see Column 7, Lines 17-33), and the input data are received from various external storage devices [e.g. paging network, cellular phone, PCS devices, etc.] and stored in the memory [Fig. 3; 40] through the Bluetooth receiving device [Fig. 3; 36] (see Column 5, Lines 33-41).

Regarding claim 6, Miyazaki discloses the working power supply can be connected from the external power source transformer [i.e. AC adapter] through the power source outlet for providing the power source required by the whole control circuit and the display (see Column 6, Lines 58-61).

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Perlman (US 2004/0145580 A1), Dow et al (US 2004/0090533 A1), Akins (US 2004/0069117 A1), Buhler et al (US 2004/0012620 A1), Hack et al (US 2003/0109286 A1), Gelbman (US 2002/0167500 A1), Weiner (US 2002/0030638 A1), Asai et al (US 2002/0000984 A1), Schiller et al (US 6,442,573 B1), McDonald et al (US 6,069,848 A), and Freeman et al (US 5,931,764 A) are cited to further evidence the state of the art pertaining to multi-development pictures and picture frame structures.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J.P.

14 September 2005



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